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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,486	07/13/2004	Philippe Torcatis	33900-155PUS	9535
27799 7590 02/05/2008 COHEN, PONTANI, LIEBERMAN & PAVANE 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176			EXAMINER THAKUR, VIREN A	
			ART UNIT 1794	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/501,486	<b>Applicant(s)</b> TORCATIS, PHILIPPE	
	<b>Examiner</b> Viren Thakur	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 27-36 is/are pending in the application.
- 4a) Of the above claim(s) 37-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/13/04</u> . | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 27-36 in the reply filed on November 16, 2007 is acknowledged.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 27-32, 34 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitation "calcium chloride." There is insufficient antecedent basis for this limitation in the claim. The claim recites coating the food with a calcium salt but then makes a comparison for the amount of calcium alginate present in proportion to calcium chloride. The claim does not positively recite calcium chloride in the second composition.

Claims 28 and 36 recites the limitation "and/or." It is unclear as to whether the claim requires both of the draining and air jet steps or only one of draining or the air jet step. The claims recite the limitation "preferably" is indefinite since, for instance, having ends of a sausage that are "preferably rounded" does not limit the ends to be rounded.

Regarding instant claim 34, it is unclear as to whether the limitation "alginate" refers to the sodium alginate or the calcium alginate formed as a result of the coagulation of sodium alginate with a calcium salt.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 27-28, 30 and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilgeland (GB 967501).**

Regarding instant claim 27, Hilgeland discloses a method of making a food product comprising a base of molded sausage meat (Page 1, lines 24-27) coated in a film comprising a gel of calcium alginate (Page 1, lines 62-83). By extruding the sausage through a conventional filler, Hilgeland discloses forming a sausage by causing it to pass through a tubular mold. Hilgeland further discloses cutting said sausage into

segments using a cut off device (Page 2, lines 55-59). As seen in figure 2 of Hilgeland, the sausage, after passing through the mold (Item 40) moves on the conveyor into a section that either sprays using nozzles or dips using a bath (Page 1, line 84 to Page 2, line 6) into a first sodium alginate composition (Page 2, lines 59-63) and then is sprayed or immersed with a coagulating agent (Page 2, lines 73-78) which comprises 5 percent calcium chloride (Page 2, lines 123-125). Regarding instant claim 28, Hilgeland discloses draining the coated product prior to being put into contact with said second composition (Page 2, lines 70-73).

Regarding instant claim 30, the sodium alginate is used at between 0.5 to 5 percent, which encompasses the limitation of 0.5 to 2 percent.

It is noted that instant claim 33 is a product by process claim and as such are not limited to the manipulations of the recited steps are only limited to the structure implied by the steps. The patentability of a product does not depend on its method of production, absent any clear and convincing evidence by applicant. The product can be made by any method provided that the recited structure of the product would have resulted from the prior art method.

In this case, Hilgeland discloses a product, in particular a sausage (Page 1, lines 24-29) comprising a molded sausage (Page 2, lines 55-59). In this case the molded sausage is formed as a result of extrusion. Said sausage is coated by an alginate gel (Page 1, lines 62-83).

Regarding instant claim 34, Hilgeland discloses using sodium alginate at from 0.5 to 5 percent (Page 2, lines 121-125).

**7. Claims 27-28, 30 and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilgeland (US 3269297).**

Regarding instant claim 27, Hilgeland discloses the steps of forming a sausage of sausage meat by passing it through a mold and then cutting said molded sausage from the molding device (Column 3, lines 45-48). As shown in figures 1 and 2, the molded sausage would then be moved while coating with a first composition comprising sodium alginate (Column 3, lines 48-51) and then coating with a calcium salt, such as calcium chloride (Column 3, lines 57-61). Hilgeland further discloses that both conveyors for coating with sodium alginate and calcium chloride can partially immersed (Column 2, lines 37-41 and Figure 2). The calcium chloride solution is used at 5 percent (Column 5, lines 28-29) which falls within the claimed limitation.

Regarding instant claim 28, Hilgeland drains the coated product prior to immersing in calcium chloride (Column 3, lines 20-30).

Regarding instant claim 30, the sodium alginate is used at between 0.5 to 5 percent, which encompasses the limitation of 0.5 to 2 percent.

It is noted that instant claim 33 is a product by process claim and as such are not limited to the manipulations of the recited steps are only limited to the structure implied by the steps. The patentability of a product does not depend on its method of production, absent any clear and convincing evidence by applicant. The product can be made by any method provided that the recited structure of the product would have resulted from the prior art method.

In this case, Hilgeland discloses a product, in particular a sausage, comprising a molded sausage, as discussed above. In this case the molded sausage is formed as a result of extrusion. Said sausage is coated by a calcium alginate gel (Column 1, lines 39-44).

Regarding instant claim 34, Hilgeland discloses using sodium alginate at from 0.5 to 5 percent (Column 5, lines 26-27).

**8. Claim 36 is rejected under 35 U.S.C. 102(b) as being anticipated by De Haan (WO 9955165).**

In this case, De Haan discloses a composition for covering food products comprising sodium alginate (See Page 11, Examples 1-4) and a vegetable protein, such as whey or soy (Page 3, lines 23-27), wherein the sodium alginate is present at between 0.1 to 4.5 percent (Page 7, lines 28-29), and further discloses using 2 percent of the hydrocolloid (Page 7, line 27) which encompasses the instantly claimed limitations. As shown in the examples, such as examples 1 and 2, the coating composition is a liquid, thus having fluidity and the sodium alginate is dispersed in the water.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**11. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (GB 967501) in view of De Haan.**

Hilgeland teaches a coating composition comprising sodium alginate used at 0.5 to 5 percent (Page 2, lines 121-122), which has sufficient fluidity such that it is sprayed (Page 1, line 84 to page 2, line 6).

Claim 36 differs from Hilgeland in reciting wherein the coating composition comprises vegetable proteins.

De Haan, similar to Hilgeland teaches using sodium alginate as a coating composition (See Page 11, Examples 1-4). In addition to adding sodium alginate to the water, De Haan teaches using vegetable proteins, such as whey (Page 3, lines 23-27) as an alternative to collagen which when used in combination with a hydrocolloid, such as sodium alginate, provide the desirable physical properties that previously were provided by the collagen, such as the heat stability and fast hardening (Page 2, lines 20-25), without a tendency for the appearance of BSE (Bovine Spongiform



Encephalopathy), as a result thereof (Page 1, lines 9-16). Therefore to add a vegetable protein, such as whey, to the coating composition of Hilgeland would have been obvious to the ordinarily skilled artisan for the purpose of providing a casing for the sausage that forgoes the harm of carrying diseases such as BSE. This is further corroborated by Hilgeland who teaches that sausage skin derived from animals can carry bacteria that shortens the shelf life of the sausages made therefrom.

**12. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (US 3269297) in view of De Haan.**

The reasons for rejection are taken as applied above to Hilgeland '501.

**13. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (US 3269297) in view of Hayter et al. (GB 1198498).**

Regarding instant claim 29, Hilgeland teaches sprinkling the segments with said first composition, with a curtain (Figure 2, item 62 and Column 3, line 67 to column 4, line 11) and also immersing said segments in the said first composition, since Hilgeland teaches partial immersion of the sausage at either of the sodium alginate and calcium chloride coating stations (Column 2, lines 37-41 and Figure 2). The claim differs in reciting wherein the sprinkling is performed prior to immersing. In Hilgeland, it appears that the sprinkling and the immersion occurs simultaneously or with immersion prior to sprinkling. Nevertheless, to sprinkle prior to immersing in said first composition would merely have been a rearrangement of two steps used for achieving the similar result of

coating a sausage with sodium alginate, and thus would not have provided a patentable distinction over the prior art. In any case, Hayter et al. is cited as additional evidence of the conventionality of spraying a molded sausage with a sodium alginate solution and subsequently immersing said sausage in the sodium alginate solution (Page 2, lines 30 to 52). In this case, a reservoir (4) holds the sodium alginate solution but when the sausage is extruded, a spray nozzle sprays sodium alginate over the sausage meat as it is extruded into the trough which is full of the same solution (Page 2, lines 37-41).

**14. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (GB967501) in view of Hayter et al. (GB 1194898).**

Regarding instant claim 29, Hilgeland teaches collection tanks and spray nozzles overhead of the tanks, which thus recirculate the coating solutions (See Items 46, 54, 51 and 43). The spray thus results in a "curtain" of the coating solution. Additionally, Hilgeland teaches that the sausage can be sprayed with the coating solutions and can also "consist of tanks for containing liquid positioned in relation to the conveyor system so that meat products are conveyed through the liquids in the tank."

Hilgeland does not specifically teach wherein after spraying with the first composition, the segments are immersed in a bath of said first composition.

Hayter et al. is cited as additional evidence of the conventionality of spraying a molded sausage with a sodium alginate solution and subsequently immersing said sausage in the sodium alginate solution (Page 2, lines 30 to 52). In this case, a reservoir (4) holds the sodium alginate solution but when the sausage is extruded, a

spray nozzle sprays sodium alginate over the sausage meat as it is extruded into the trough which is full of the same solution (Page 2, lines 37-41).

Nevertheless, to sprinkle prior to immersing in said first composition would merely have been a rearrangement of two steps used for achieving the similar result of coating a sausage with sodium alginate, and thus would not have provided a patentable distinction over the prior art.

**15. Claims 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (US 3269297) in view of Kuijpers et al. (US 6780452), Kielsmeier et al. (US 3404430) and Greenham et al. (US 4110871).**

Regarding instant claim 32, Hilgeland teaches a tubular mold, since the cutting device, which is at the end of the extruder, shows a tubular cross section (See Column 2, lines 4-8) of US 3158895, which has been incorporated within Hilgeland '297 (Column 2, lines 31-36).

Claim 32 differs from Hilgeland in reciting wherein the sausage is caused to contract and then expand so as to cause at least a fraction of the fibers in the fibrous meat to take up a transverse direction.

Kuijpers et al. teaches a constricting means (Figure 6, Item 48) in extruding tubular sausage which results in a random orientation of the meat (Column 2, lines 62-65). As a result, the extruded tubular sausage of Kuijpers et al. has a curved shape, which has greater appeal (Column 1, lines 6-10).

Based on this teaching, it would have been obvious to use a constricting means in the extruding mold of Hilgeland for the purpose of producing a curved sausage. Such a modification would have resulted in a greater appealing product.

Additionally, Kielsmeier et al. teaches a constricting means (Figure 4, item 23) prior to placing the sausage in the mold for controlling the surface particle appearance in the sausage product (Column 1, lines 32-37; Column 2, lines 26-32). The homogeneity of the particles or the smeared surface appearance is eliminated by using a constricting means, as taught by Kielsmeier et al. to allow the coarser sausage particles to migrate to the surface of the mold into which the batter is being placed (Column 1, line 70 to column 2, line 11). Greenham further teaches that the use of constricting means for the purpose of exchanging the inner portion of the meat with the surface portions of meat (Column 3, lines 4-8) provided an improved surface appearance to a sausage product, that also resulted in a more juicy product when cooked (Column 2, lines 32-41).

Therefore it would further have been obvious to one having ordinary skill in the art to provide a constricting means, such as that taught by Kielsmeier et al. and Greenham, prior to expansion in the mold, for the purpose of providing a sausage having an improved surface appearance after molding and is juicier when cooked.

Regarding instant claim 35, as a result of using the constricting means, as taught by Kuijpers et al., Kielsmeier et al., and Greenham, the product formed by modified Hilgeland would have had fibers taking up a transverse orientation.

**16. Claims 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (GB 967501) in view of Kuijpers et al. (US 6780452), Kielsmeier et al. (US 3404430) and Greenham et al. (US 4110871).**

The reasons for rejection are taken as applied above to Hilgeland '297.

**17. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (US 3269297) in view of Giraldo et al. (US 6558725), Granly Koch (WO02056694) and Gabel (US 4041822).**

Hilgeland is taken as cited above. Claim 31 differs from Hilgeland in reciting wherein the sausage cutting tools are wetted with said first composition in order to lubricate them.

Giraldo et al. teach a method and apparatus for slicing a food product wherein a continuous spray of a lubricant is applied to the cutting knife and is also used to coat the cut product (See Abstract). Applying the lubricating medium, such as water or oil, keeps the cutting surface clean and free of debris and also is used to coat the sliced food product (Column 2, lines 33-59)

Granly Koch et al. teach coating a meat product with a solution and also coating the knife that slices the meat product with the same solution (Page 2, lines 11-14). As a result of applying the solution to the knife, the solution can also be transferred to the cut portions of the meat via the knife. Granly Koch et al. are also relied on as a broad teaching of the conventionality of using a coating solution applied to the food product to also coat the cutting blade.

Gabel is relied on to teach that it has been known in the art the particles of sausage meat tend to stick to the slicing blades (Column 1, lines 28-40). The art further recognized using means for preventing adhesion of particles of food to the cutting blades (Column 10, lines 25-38).

Based on these teachings, it would have been obvious to one having ordinary skill in the art to use the solution which is applied to the food product, also as a lubricant to the cutting surface for the purpose of preventing debris and food particles from collecting on the cutting surface.

**18. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hilgeland (GB 967501) in view of Giraldo et al. (US 6558725), Granly Koch et al. (WO02056694) and Gabel (US 4041822).**

The reasons for rejection are taken as applied above to Hilgeland '297.

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3228357 discloses the concept of using air to produce a uniformly coated food product and then discloses applying another coating of another composition to the food product. US 4405647 discloses a powder that coats the food product and also prevents tackiness on the blades. US 2847311 discloses coating a knife with a starch to prevent sticking of the food product to the knife.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viren Thakur whose telephone number is (571)-272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Viren Thakur  
Examiner  
Art Unit: 1794

*Steve Weinstein*  
STEVE WEINSTEIN  
PRIMARY EXAMINER 1794  
2/4/08